Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte GRAHAM NICHOLSON, JOHN WILLETTS,
ARTHUR MABLESON and COLIN J. WESTON

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Appeal No. 2004-0470
Application No. 09/673,771

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HEARD: May 18, 2004

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Before COHEN, ABRAMS and MCQUADE, Administrative Patent Judges.

MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Graham Nicholson et al. appeal from the final rejection of claims 1 through 21, all of the claims pending in the application.

THE INVENTION

The invention relates to "a removable protective casing for the protection of heavy and possibly hazardous articles during

storage and/or transit" (specification, page 1). Representative claim 1 reads as follows:[1]

1. A casing for the protection of an article contained within the casing, the protective casing comprising:

at least two casing members which are assemblable to constitute a casing having an internal volume to receive the article, each of said at least two casing members comprising;

an outer skin of fibre reinforced plastics material having a plurality of layers of reinforcing fibres in a plastics material matrix, said layers overlaid one upon the other;

an inner skin of fibre reinforced plastics material having a plurality of layers of reinforcing fibres in a plastics material matrix, said layers overlaid one upon the other;

a filling of a low density core material in a space between the outer and inner skins;

sealing means disposed in the joint face between said at least two casing members; and

fastener means to hold said at least two members together.

THE PRIOR ART

The references relied on by the examiner as evidence of obviousness are:

Bastone et al. (Bastone) 3,412,891 Nov. 26, 1968

[1] Claims 2, 6 and 7 recite various casing materials selected from open-ended groups of indefinite scope. Upon return of the application to the technology center, appropriate action should be taken to obviate this problem (e.g., by amending the claims in question to define the groups of materials in proper Markush format as set forth in MPEP § 2173.05(h)).

Elliott et al. (Elliott)	3,490,638	Jan. 20, 1970
Gablin et al. (Gablin)	4,100,860	Jul. 18, 1978
Ball	4,562,857	Jan. 7, 1986
Augur	4,811,858	Mar. 14, 1989
Burdick	5,695,090	Dec. 9, 1997
Schneider	6,119,861	Sep. 19, 2000

THE REJECTIONS

Claims 1 through 3, 6 through 8, 10, 14, 15 and 19 through 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ball in view of Elliott.

Claims 4 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ball in view of Elliott and Bastone.

Claims 9, 16 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ball in view of Elliott and Schneider.

Claims 11 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ball in view of Elliott and Augur.

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ball in view of Elliott and Burdick.

Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ball in view of Elliott and Gablin.

Attention is directed to the main and reply briefs (Paper Nos. 14 and 16) and to the final rejection and answer (Paper Nos. 11 and 15) for the respective positions of the appellants and the examiner regarding the merits of these rejections.

DISCUSSION

Ball, the examiner's primary reference, discloses an article for encasing and thermally insulating a well site valve to prevent it from freezing and becoming inoperable in cold weather. The article includes composite housing members formed of shells of molded plastic having fiber glass or polyurethane insulation disposed therebetween (see, for example, column 4, line 15, through column 5, line 2), connecting means for joining the housing members to one another (see, for example, column 5, lines 3 through 18), and sealing means for rendering water-tight the joined edges of the housing members (see, for example, column 5, lines 18 through 25).

As implicitly conceded by the examiner (see page 2 in the final rejection), Ball does not respond to the limitations in independent claim 1 calling for the casing members to comprise inner and outer skins of fibre reinforced plastics material having a plurality of overlaid layers of reinforcing fibres in a plastics material matrix. To overcome this deficiency, the examiner turns to Elliott.

Elliott pertains to spherically curved shell-type bodies designed to withstand the high hydrostatic pressures associated with underwater research and exploration. The walls of the

bodies consist of "resin reinforced by short length high modulus filaments extending substantially normal to the inner and outer surfaces of the wall, i.e. generally radially, and preferably through the entire wall thickness from one of the surfaces to the other" (Abstract). According to Elliott (see column 8, line 48, through column 9, line 2), shells having this construction compare favorably with the conventional filament-wound shell 51 shown in Figure 21a in terms of damage repair and port opening formation.

In proposing to combine Ball and Elliott, the examiner, focusing on Elliott's discussion of the filament-wound shell shown in Figure 21a (see page 4 in the answer), submits that "[i]t would have been obvious to one of ordinary skill in the art to have employed the fiber reinforced plastic skin teachings set forth in Elliott, et al. in the construction of the device of Ball, motivated by the strength achieved thereby" (final rejection, page 2).

Elliott's passing mention of the filament wound shell shown in Figure 21a, however, would not have provided the artisan with any suggestion or motivation to make the inner and outer skins/shells of Ball's housing members of fibre reinforced plastics material having a plurality of overlaid layers of

reinforcing fibres in a plastics material matrix as recited in appealed claim 1. The examiner's conjecture that Ball's housing members would benefit from the additional strength afforded by this modification has no basis in the fair teachings of these references. The only suggestion for combining the disparate disclosures of references respectively directed to an article for thermally insulating a well site valve (Ball) and shells designed to withstand high hydrostatic pressures (Elliott) in the manner proposed by the examiner stems from hindsight knowledge impermissibly derived from the appellants' disclosure.

Accordingly, we shall not sustain the standing 35 U.S.C. § 103(a) rejection of independent claim 1, and dependent claims 2, 3, 6 through 8, 10, 14, 15 and 19 through 21, as being unpatentable over Ball in view of Elliott.

As the examiner's additional application of Bastone, Schneider, Augur, Burdick and Gablin does not cure the above noted shortcomings of the Ball and Elliott combination relative to the subject matter recited in independent claim 1, we also shall not sustain the standing 35 U.S.C. § 103(a) rejection of dependent claims 4 and 5 as being unpatentable over Ball in view of Elliott and Bastone, the standing 35 U.S.C. § 103(a) rejection of dependent claims 9, 16 and 17 as being unpatentable over Ball

in view of Elliott and Schneider, the standing 35 U.S.C. § 103(a) rejection of dependent claims 11 and 12 as being unpatentable over Ball in view of Elliott and Augur, the standing 35 U.S.C. § 103(a) rejection of dependent claim 13 as being unpatentable over Ball in view of Elliott and Burdick, or the standing 35 U.S.C. § 103(a) rejection of dependent claim 18 as being unpatentable over Ball in view of Elliott and Gablin.

SUMMARY

The decision of the examiner to reject claims 1 through 21 is reversed.

REVERSED

IRWIN CHARLES COHEN Administrative Patent Judge	)	
NEAL E. ABRAMS Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JOHN P. MCQUADE Administrative Patent Judge	)	

JPM/gjh

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